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SUMMARY REPORT
NORTHERN PLAINS COLLEGE OF
VETERINARY MEDICINE
A FEASIBILITY STUDY



THE OLD WEST REGIONAL COMMISSION
February 1976

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SUMMARY REPORT
NORTHERN PLAINS COLLEGE OF
VETERINARY MEDICINE
A FEASIBILITY STUDY

PREPARED FOR:
THE OLD WEST COMMISSION
BY
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The Old West Region Commission is a Federal-State partnership designed to solve regional economic problems and stimulate orderly economic growth in the states of Montana, Nebraska, North Dakota, South Dakota and Wyoming. Established in 1972 under the Public Works and Economic Development Act of 1965, it is one of seven identical Commissions throughout the country engaged in formulating and carrying out coordinated action plans for regional economic development.

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FOREWORD

This publication is a summary report of the second phase of a Commission investigation into the feasibility of establishing a regional school of veterinary medicine. For those who wish to consider the question in depth, a comprehensive report is available upon request. This publication contains a summary of the points which are detailed in that full report.

The Commission is indebted to the contractor and to all officials within the Region who had a role in preparation of this report, and particularly to the following members of the Commission's Veterinary College Advisory Board:

Dr. Jack Catlin
Department of Veterinary Science
Montana State University

Dr. Duane Rice, President
Nebraska Veterinary Medical Association

Dr. Dean E. Flagg
North Dakota State Veterinarian

Dr. Herman Ross
Kalispell, Montana

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SUMMARY

A report entitled Assessment of the Need for a College of Veterinary Medicine in the Old West Region, was adopted by the Old West Regional Commission (OWRC) on April 15, 1975. The study concluded that the Old West Region has an unequivocal need for a college of veterinary medicine (CVM) and authorized the present study entitled "Northern Plains College of Veterinary Medicine, A Feasibility Study."

BASIC ASSUMPTIONS

The researchers in concert with advice of the OWRC Veterinary College Advisory Board agreed that the study should be predicated upon several assumptions concerning the proposed college. The regional college should possess the following features:

1. High scientific and professional quality which exceed the minimum requirements for accreditation;
2. Programs of education, research and public service which are relevant to the regional needs;
3. An innovative curriculum designed to make use of existing veterinary science departments and industrial, governmental, and private resources (such as libraries, laboratories, equipment, and personnel) in the five states;
4. Capital and operating costs adequate for maintaining high educational standards and appropriate physical facilities;
5. An administrative organization designed to include equitable representation from the five cooperating universities;

6. An admission policy giving first priority to residents of the Region; and
7. A close working relationship with the animal industries, state veterinary medical association, and veterinarians in the Region.

OBJECTIVES

Specific objectives of this study include determination of:

1. Programs of education, research and public service designed uniquely to fulfill the specific needs of the Old West Region;
2. Institutional data on the number of students and faculty in the regional college;
3. An equitable formula for utilization of the college by the five states;
4. The optimal location for the nucleus of the regional college of veterinary medicine based upon objective evaluation of alternate locations;
5. Appropriate organization of veterinary programs among the universities;
6. A plan for governance and administration;
7. Sources of capital and operating funds other than state appropriations;
8. Space requirements and capital costs giving consideration to maximal utilization of existing university facilities;
9. Operating costs;

10. Equitable formulas for participation of each cooperating state in funding the college; and
11. Recommendations based upon the above data.

CONCLUSIONS AND RECOMMENDATIONS

THIS STUDY UNEQUIVOCALLY CONCLUDES THAT IT IS ECONOMICALLY AND EDUCATIONALLY FEASIBLE FOR THE STATES OF MONTANA, NEBRASKA, NORTH DAKOTA, SOUTH DAKOTA AND WYOMING TO ESTABLISH A COLLEGE OF VETERINARY MEDICINE TO SERVE THE REGION. This conclusion is substantiated by the following findings:

I. Economic Advantages of the Northern Plains College of Veterinary Medicine over Contracting.

1. The total annual per student cost (education plus facilities use) to the states is less for the regional CVM than for the total annual per student contract fees proposed by veterinary colleges outside of the Region.

The per student cost of the Northern Plains College of Veterinary Medicine is compared with the level of contract payments for veterinary education proposed by existing veterinary colleges to states in the Region. The contract fee per Doctor of Veterinary Medicine degree (DVM) student for the current (1975-76) academic year is based upon direct and indirect "costs of education" computed from the actual expenditures for DVM education during the immediate prior (1974-75) year plus a "facilities use" fee. That portion of the cost of education which is derived from

federal education grants, tuition paid by the students, and income from professional service rendered at the teaching hospital are deducted from the total education cost to arrive at the contract fee.

Table 1* shows the annual contract payments per DVM student for direct and indirect costs of education and for use of facilities at two veterinary colleges outside of the Region in comparison with the per student cost of the proposed CVM. The total state costs per student (education plus facilities) at the Northern Plains College of Veterinary Medicine is \$7,823 under plan "A" and \$7,481 under plan "B". (These plans are described in a later section.) Annual state costs under both plans are well below the total contract fees proposed by the colleges of veterinary medicine at the University of Minnesota (\$11,679) and Colorado State University (\$8,500). Nebraska prepays its share of capital in both plans in lieu of paying a facilities use fee; therefore, Nebraska pays only the annual education cost.

Comparison of the contract fee with the per student cost of the proposed college indicates that it is economically attractive and feasible for the Region to establish its veterinary college.

2. In addition to the lower per student cost, the CVM has a second related advantage over contracting. Veterinary students receive all or part of their education in their home state; therefore, part of each state's payment for operating costs is returned to the university in its state.
3. The five participating universities have departments of veterinary science, or equivalent, with facilities, personnel and

* Identical to Table 9.3 in full report.

TABLE 1 Comparison of Per Student Cost of Contracts Versus Per Student Cost of Northern Plains College of Veterinary Medicine

College of Veterinary Medicine	Proposed Annual Fee Per DVM Student(a)		
	Education	Facilities	Total
Northern Plains Plan "A"	\$5,756 ^(b)	\$2,067 ^(c)	\$7,823
Plans "B" & "C"	5,756	1,725	7,481
University of Minnesota ^(d)	11,186	493	11,679
Colorado State University ^(e)	5,120	3,380	8,500

(a) Figures rounded to nearest whole number. Payable for academic year 1975-76.

(b) Total fee paid by Nebraska because facility fee is prepaid.

(c) Rounded per student annual fee, Plan "A" \$2,067.21 or Plan "B" \$1,724.97, from Table 8.10, Chapter 8. Per student fees in Plan "C" and Plan "B" are identical.

(d) Contract proposal received by the University of Nebraska-Lincoln from the University of Minnesota dated January 15, 1975.

(e) Memorandum received by Montana State University from the Western Interstate Commission for Higher Education, dated March 27, 1975, and data updated by Dean W.J. Tietz of Colorado State University on October 31, 1975.

operating funds which can economically and feasibly be expanded into the Northern Plains College of Veterinary Medicine*. An inventory revealed the following existing resources at the participating universities which can be shared and serve as part of the CVM:

- (a) Capital resources, facilities and land, with 1975 total replacement cost of over \$25 million.
- (b) Human resources and operating funds in the five departments of veterinary science are allocated to ongoing programs which represent functions ordinarily and regularly performed by a CVM. Those resources which are relevant to a CVM but need not be duplicated are:

<u>Function</u>	<u>FTE Personnel**</u>	<u>Expenditures in Fiscal 1975</u>
Diagnostic Laboratories	70.15	\$1,001,751
Veterinary Research	68.20	1,414,132
Veterinary Extension	4.00	153,871
Total	142.35	\$2,569,574

- 4. An objective method involving 60 criteria was used to select the optimal location for the nucleus of the CVM. On the basis of quantitative data, it is recommended that portions of the CVM be located at each participating university with the nucleus located at the University of Nebraska-Lincoln.
- 5. The Regional CVM will minimize the loss of the states' investment in DVM education as well as the loss of human resources experienced with contracts; 60 percent loss of graduates and 60 percent loss of the state's investment in DVM education is North Dakota's and Nebraska's experience

* Funds will flow from the CVM to the departments of veterinary science for the DVM program.

** FTE = full time equivalent.

with contracts. Graduates tend to practice in the region where they receive the DVM degree. The Northern Plains CVM is designed to provide part of the DVM education, including clinical education, in the student's home state. This strategy will (a) improve the maldistribution of veterinarians by retaining highly qualified young people in food animal practice in underserved rural areas, and (b) minimize the loss to the Region of financial as well as human resources.

11. Program Advantages of the Northern Plains College of Veterinary Medicine over Contracting

1. It is recommended that the educational program of the regional CVM be designed as a continuum including preveterinary medicine, the DVM degree program, and continuing education. It is deemed feasible for (a) students to be admitted to the regional CVM after three years of preveterinary medicine; (b) continue their first year in the DVM program and receive the B.S. degree at their home universities; (c) complete years two and three, and nine months of the fourth year at the University of Nebraska-Lincoln; and (d) take three months of the twelve-month fourth year under the direction of the university in the student's home state (Table 2*). This schedule permits facilities, courses and personnel, already existing in the five states to be used for the entire first year and part of the final year of the DVM program--an advantage not incorporated in the contract approach.

*Identical to Table 5.4 in full report.

TABLE 2 Distribution of Preveterinary Medicine and Doctor of Veterinary Medicine Instructional Programs

Year in Program	MSU (months)	UN-L (months)	HDSU (months)	SDSU (months)	UW (months)
Admission to Preveterinary Medicine Program*					
Year 1	9	9	9	9	9
Year 2	9	9	9	9	9
Year 3	9	9	9	9	9
Admission to Regional College of Veterinary Medicine**					
Year 1	9	9	9	9	9
Award B.S. Degree	x	x	x	x	x
Year 2		9			
Year 3		9			
Summer	3***	3****	3****	3****	
Year 4		9****			

* Preveterinary medicine usually takes four years.

** 150 semester credit hours in DVM program; average semester hours of credit among 20 North American Colleges of Veterinary Medicine is 152.9 (8).

*** Externship program and elective courses. An extern is a student being educated in a private veterinary practice.

**** Clinical education blocks.

2. The quality of clinical education is enhanced by utilization of the abundant number and variety of food animals, horses and other species throughout the five states. The recommended modular curriculum, with its selective block system and externship program for clinical instruction, will capitalize upon the enormous number and variety of teaching patients in the Region. The Northern Plains CVM is planned to assure full accreditation by surmounting the primary deterrent to instruction in several of the Nation's existing veterinary colleges--excessive numbers of students relative to the minimal number and variety of animal patients for use in clinical teaching.
3. It is recommended that the regional CVM be planned to accommodate a total of 612 FTE students including a maximum of 384 professional students, 65 graduate students, 35 interns and residents, and 128 continuing education students.

Table 3* summarizes the number of faculty and administrative personnel and each level of student to be accommodated by the regional college. It should be noted that all students are post-baccalaureate and for planning purposes are considered as graduate-professional and graduate students.

This study recommends that a balanced program of instruction, research, and public service will require 96 faculty, and 10 administrative personnel plus clerical, technical, custodial, and other support staff.

4. An equitable solution to the Region's demands in veterinary medicine is reasonably assured. It is recommended that student

*Identical to Table 3.2 in full report.

TABLE 3. Summary of the Number of Students, Faculty, and Administrative Personnel to be Accommodated by the Regional College

Classification of Personnel	Number
STUDENTS (Candidates for Degrees)	
Doctor of Veterinary Medicine	384
Master of Science	35
Doctor of Philosophy	30
STUDENTS (Candidates for Certificates)	
Residency and Internship	35
Continuing Education	128
TOTAL NUMBER OF STUDENTS	612
FACULTY	96
ADMINISTRATIVE PERSONNEL (Directors, Dept. Chairmen, Dean)	10
GRAND TOTAL	718

spaces be allocated to each state in the same proportion that the state population is to the total population of the Region (Table 4*).

This state-population plan is an equitable arrangement which has two distinct advantages. First, it is easily administered because the number of students from each state is established by the official population figures. Secondly, the relatively stable allocation of student spaces facilitates planning for future financial obligations of the states as well as the numbers of students who will be enrolled. In contrast, contracts must be negotiated frequently, at best are uncertain, and represent stop-gap efforts to purchase DVM education.

5. The Northern Plains CVM is conceived and planned to create unique programs which capitalize on advances in communication and other technology, as well as contemporary learning and organizational concepts. Contracting offers no opportunity for the states to exercise control over educational programs nor utilizing existing teaching resources.

Recommended departures from the traditional includes:

- (a) utilization of faculty expertise and courses at five universities;
- (b) a modular core-elective curriculum compatible with an independent study program, computer assisted instruction, externships, and two-way audio and color video telecasts via Communications Technology Satellite; and

*Identical to Table 3.3 in full report.



TABLE 4 Population Basis for Full Time Equivalent (FTE) Student Space Allocation by State at Maximum Enrollment

State	Population in 1980 (1)	Per cent of Total Population (2)	Professional		Graduate Intern Residency	Cont. Edu.	Total by State
			No. per Class	Four-Class Total (3)			
HT	733,100	18	17	68	18	23	109
NE	1,588,000	38	37	148	38	49	235
ND	637,600	15	14	56	15	19	90
SD	741,100	18	17	68	18	23	100
WY	451,100	11	11	44	11	14	60
	4,150,900	100	96	384	100	128	612

- (1) Population projections developed by Centaur Management Consultants, Washington, D.C., in connection with the Old West Regional Commission's Economic Development Plan to be released early in 1976.
- (2) Rounded to nearest whole number from following calculated percentages, HT 17.66, NE 38.26, ND 15.36, SD 17.85, WY 10.87.
- (3) Number in one class multiplied by four (number of classes in CVM).

- (c) quality control of instruction and learning among the five universities aided by a computer based Tutorial Evaluation System and faculty counselling.
6. This study recommends that flexible programs of education be developed for the proposed CVM utilizing education technology which is economically feasible.
 7. It is recommended that the curriculum at each participating university be similar and compatible with emphasis upon correlation of the comparative medical sciences.
 8. This study recommends that educational planning give high priority to an elective program which includes preceptorships or externships. Utilization of existing resources in the Region such as existing courses and facilities in the universities, existing group veterinary practices, and private as well as governmental stations or laboratories is also recommended.
 9. It is recommended that the faculty have the opportunity to choose elements from the independent learning, lecture-laboratory and the core-elective approaches and to weigh the cost-benefits and educational merit as important selection criteria.
 10. Continuing education for all areas of the five states is given high priority, and is designed to capitalize upon advanced communication technology.
 11. A regional information exchange network is recommended for the purpose of linking the diagnostic laboratories, referral services, and extension services throughout the five states.

12. Contracts have failed to provide important benefits such as continuing education, intern and residency education, and patient referral services.

111. Administrative Advantages of the Northern Plains College of Veterinary Medicine over Contracting

1. Full control of governance, admissions, curriculum, standards, programs, personnel, and budgets of the CVM is vested in the participating states.

(a) This study recommends that the regional college of veterinary medicine be governed by a Board of Trustees with equal representation from each of the governing bodies of the five participating universities. The Board of Trustees shall have five members; one representing the governing body of each of the following universities: Montana State University, the University of Nebraska-Lincoln, North Dakota State University, South Dakota State University, and the University of Wyoming.

(b) It is recommended that administration of the regional college be the responsibility of the Chancellor of the University of Nebraska-Lincoln, the Vice Chancellor of Agriculture and Natural Resources, Dean of the College of Veterinary Medicine and seven Department Chairmen. It is further recommended that the Departments of Veterinary Science (Division of Microbiology and Veterinary Medicine at the University of Wyoming) at each of the participating universities serve as departments in the regional CVM (Figure 1*).

*Identical to Figure 6.1 in full report.

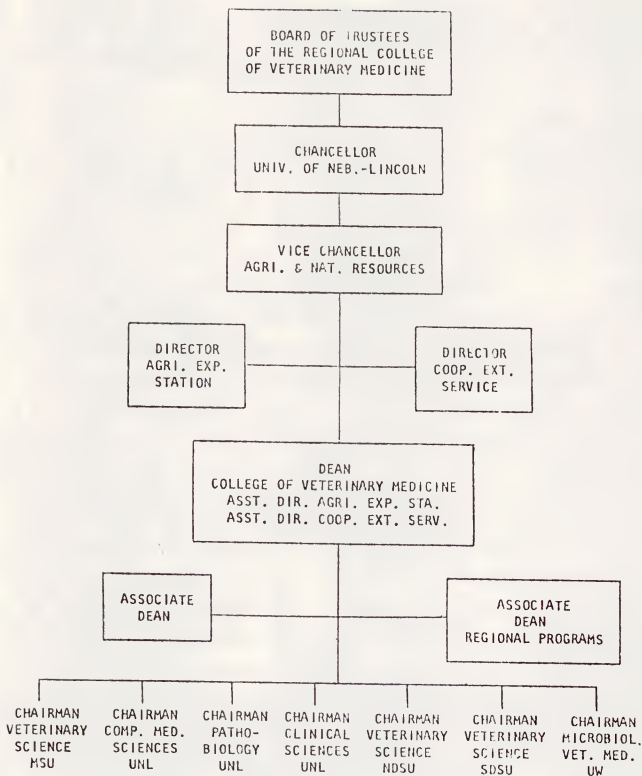


FIGURE 1. Suggested Organization Chart for the Regional College of Veterinary Medicine

- (c) This study recommends that the veterinary faculty at each of the five participating universities be represented on the Standards Committee and the Curriculum Committee of the regional college.
- (d) Finally, it is recommended that an Admissions Committee in each of the five states be responsible for (1) evaluation of applicants from its respective state and (2) certifying to the Chairman of the Department of Veterinary Science, who shall certify to the Dean of the College of Veterinary Medicine, those students who are selected to fill the state's quota in the first-year class.
2. The CVM will enable the Region to be eligible to receive federal, foundation and private funds for veterinary medicine. Funds earmarked for veterinary colleges are not available to the Region under the contract system.

A large portion of the capital and operating funds, as well as student scholarships and loans, for the nation's veterinary colleges is provided by federal agencies.

It is essential that college administrators seek federal participation in construction with utmost vigor and expertise. If the college is successful in obtaining federal funds for construction, this study recommends that such funds obtained be used as a credit toward each state's capital obligation proportional to the amount of participation by each state.

It is feasible for the college to plan for grants, contracts and gifts to support education, research, scholarships and fellowships. This study recommends that the leadership of the veterinary

college be aggressive and skillful in seeking financial support of its programs from foundations, industry and private donors, as well as from federal agencies.

This study recommends that the level of tuition for DVM students be identical to that for medical students at the University of Nebraska College of Medicine.

IV. Advantages of the Northern Plains College of Veterinary Medicine over Contracting Relative to the Geographic Distribution of Veterinarians.

The unmet demand for veterinarians to conduct food animal practice in rural areas of the Region is an unresolved problem. Exercising control over the curriculum and admissions policies provides the states with a means of alleviating this problem. In contrast, contracting offers no control over curriculum, and allows only limited student selectivity. The following steps are recommended to make the regional CVM responsive to demands for its graduates to practice in the Region's underserved areas:

1. Provide part of the DVM education in the student's home state.
2. Emphasize food animal health throughout the educational program.
3. Design the curriculum to include externships for students in food animal practice in each of the five states.

4. Forgiveness of H.E.W. educational loans to graduates who practice in shortage areas.

V. Alternate Plans for Capital Financing

University owned land, which is available for the Northern Plains CVM, need not be purchased. An inventory shows that the participating universities have facilities plus land with a 1975 replacement value of over \$25 million, which may be shared and serve as part of the regional college. For example, at Montana State University and perhaps at the University of Wyoming, it would be feasible to teach medical and veterinary medical students simultaneously in several of the preclinical sciences. Autotutorial laboratory, classroom, and laboratory requirements for medical and veterinary medical students are identical.

Comparison of the total space required for the CVM with the inventory of existing space revealed unmet needs for clinical teaching and patient care facilities, specialized student learning areas, and faculty offices and laboratories. Calculation of unmet space requirements yielded 222,200 gross square feet. The total project cost of this addition to the existing facilities was estimated at \$14 million (Table 5*).

Three alternate plans proposed for financing the total capital requirements are as follows:

PLAN "A" proposes 40 percent funded by the Old West Regional Commission and 60 percent by the five participating states

*Identical to Table 8.9 in full report.

TABLE 5. Cost of Addition to Existing Facilities

Space	NASF*	GSF*	NASF	GSF	Cost of Addition 1975
Total Space Required for CVM			245,995	378,454	
Existing Space to be Used Regularly**					
UN-L	65,478	100,735			
MSU, NDSU, SDSU, UW	36,087	55,519			
Subtotal Existing Space			101,565	156,254	
New Addition Required			144,430	222,200	
Total Capital Cost					
\$63.00/GSF*** 222,200					
GSF = \$13,998,600 rounded to					\$14,000,000

* NASF=net assignable square feet. GSF=gross square feet.

** The net assignable square feet (NASF) used here is not equivalent to total space which might be available at any given time. Rather it is functionally appropriate NASF to be relied upon with certainty and regularity.

*** Clinical Sciences facility (268,000 GSF) at Kansas State University, comparable to addition required for Regional CVM, was bid August 21, 1975 at \$62.81 per GSF. See text on cost estimates or actual construction bid on seven veterinary medical facilities in North Dakota, Nebraska, Colorado, Minnesota and Kansas between January 1974 and August 1976.

prorated on the basis of the number of student spaces allocated to each state.

PLAN "B" proposes 50 percent funded by the OWRC and 50 percent by the states.

PLAN "C" proposes 25 percent funded by the U.S. Department of Health, Education, and Welfare, 25 percent by the OWRC, and 50 percent by the states.

For example, under Plan "A" the OWRC provides \$5.6 million over a period of three fiscal years; Nebraska having 38 percent of the enrollment appropriates 38 percent of the five state's share or a total of \$3,192,000 over a period of three fiscal years. The remainder, 62 percent of the student spaces, is apportioned 18 percent to Montana, 15 percent to North Dakota, 18 percent to South Dakota and 11 percent to Wyoming. It is infeasible for these four states to appropriate capital funds for construction outside of their respective borders; therefore, 100 percent of the capital requirements for these four states is financed by City of Lincoln, Nebraska revenue bonds. Revenue for payment of the annual cost of amortizing the loan is derived from a fee of \$2,067 in Plan "A" (or \$1,725 in Plans "B" and "C") per student space allotted to Montana, North Dakota, South Dakota and Wyoming. Annual fees assessed for the full quota of students during the first three years of operation (until four classes are enrolled) represent start-up costs needed for loan payment. Nebraska prepays its full share (38 percent) of the capital funds prior to the enrollment of students, in lieu of paying an annual facilities use fee.

Any one of the plans exhibited in Table 6* is judged to be highly feasible.

*Identical to Table 8.10 in full report.

TABLE 6. Alternate Plans for Financing Construction Costing \$14,000,000

Plans	Percent Matching Funds (Numbers in Millions)			Percent Use of Facility by Residents from Each State		MT, ND, SD, and WY Share Financed by City of Lincoln Revenue Bonds Amortized by a Use Fee		
	U.S. Dept. HEW(1)	OWRC	Five States Total	Used by Students of NE 38% Therefore Nebraska Appropriates	Used by Students of MT 18% ND 15 SD 18 WY 11 Total 62 to Finance	Fees for Lease and Bonds(2) Add \$35,000	Annual Cost of Amortizing \$93.05/ \$1000(3)	Annual Use Fee Per Student from MT ND SD WY(4)
A	0%	40% \$5.6	60% \$8.4	\$3,192,000	\$5,208,000	\$5,243,000	\$487,861.15	\$2,067.21
B	0%	50% 7.0	50% 7.0	2,660,000	4,340,000	4,375,000	407,093.75	1,724.97
C	25% \$3.5	25% 3.5	50% 7.0	2,660,000	4,340,000	4,375,000	407,093.75	1,724.97

- (1) Congress passed a continuing resolution authorizing Dept. of HEW participation until June 30, 1976.
- (2) Legal, advertising, printing, bond registration fees.
- (3) Rate: 8.5% for 30 years. Example Plan "A": $\$5,208,000 + \$35,000 = \$5,243,000 \times \93.05 per thousand = \$487,861.15 annual payment to amortize loan.
- (4) Total DVM students is 384 less 148 Nebraska = 236 residents of MT, ND, SD, and WY. Example Plan "A": $\$487,861.15 \text{ annual fee} \div 236 \text{ students} = \$2,067.21$ per student per year.

At the time a decision is made to establish the regional CVM, it is recommended that the college leadership seek maximum federal funding and that the formula for financing be revised to reflect maximum federal participation.

VI. Financing Operating Costs

Operating costs were estimated in accordance with the concept that the Northern Plains College of Veterinary Medicine can be established by adding the DVM degree program to the five participating departments of veterinary science. In fiscal 1975, those departments expended \$2,569,754 for diagnostic, research, and extension activities. When the CVM is operating, it is estimated that those departments will expend \$252,781 from funded or non-state sources for graduate and continuing education (tuition and federal fellowships).

It is concluded that the annual operating costs (over the above) for addition of DVM education is \$3,440,256; \$1,229,952 being supplied by private and federal sources and \$2,210,304 from the states. All sources of income to defray the total operating costs are exhibited in Table 7*.

It is recommended that operating costs be equitably shared among the participating states in proportion to the number of student spaces allocated to each state. On this basis, \$5,756 per student per year from state funds (64 percent) and \$3,203 per student per year from federal and private sources (36 percent) will provide the total operating funds for adding the DVM degree program.

*Identical to Table 9.2 in full report.

TABLE 7. Summary of Income to Defray Total Operating Costs⁽¹⁾

Total Annual Operating Costs		\$6,262,791
<u>Currently Funded Programs in Vet. Sci.</u> ⁽²⁾		
Services:		
Diagnostic laboratories	1,001,751	
Veterinary medical research	1,414,132	
Veterinary medical extension	153,871	
Subtotal		2,569,754
<u>Programs Funded or Nonstate Sources</u>		
Graduate and Continuing Education:		
Tuition \$693.75 x 35 FTE non-exempt ⁽³⁾	24,281	
Tuition \$40.00 x 1,600 cont. educ. ⁽⁴⁾	64,000	
Federal-state \$4,700 x 35 FTE grad.	164,500	
Subtotal		252,781
<u>Private and Federal to Add DVM Degree Program</u>		
Tuition \$780 x 384 students ⁽⁵⁾	299,520	
Federal capitation \$1,123 x 384 ⁽⁶⁾	431,232	
Hospital income \$1,300 x 384 ⁽⁷⁾	499,200	
Subtotal		1,229,952
Less subtotal		4,052,487
Total State Appropriation to Add DVM Program \$5,756 x 384 students ⁽⁸⁾		\$2,210,304

- (1) In 1975 dollars at maximum enrollment; all students enrolled in a 12-month year-round program except for two summer quarters in the DVM curriculum.
- (2) Survey of departments of veterinary science (Appendix A and D).
- (3) Rate for UN-L Graduate College, two semesters plus summer session.
- (4) Average annual fees per student over two years at Ohio State University, College of Veterinary Medicine.
- (5) Same as UN-L, College of Medicine, 13 quarters @ \$240 pro-rated over 12 quarters.
- (6) Actual 1975 award to Ohio State University, College of Veterinary Medicine was \$1,123.25 per DVM student enrolled Fall 1974.
- (7) 60th percentile of 17 U.S. veterinary college teaching hospitals in fiscal 1975.
- (8) Annual cost of education per DVM student after deducting \$3,203 per student derived from nonstate sources.

VII. Timetable for Development of the Northern Plains CVM

Operating as well as capital costs incurred between the time a decision is made to establish the college and the time students are enrolled are minimized by adhering to the shortest possible timetable. The schedule proposed here for specific decisions and actions is optimistic yet quite feasible if leaders and groups make decisions in a reasonable period of time. Table 8* summarizes the key decisions and the approximate date for each action.

After the OWRC has approved the "Feasibility Study" and the five universities have adopted the proposal in principle, it is essential to initiate planning. The planning team includes: university planners, the dean of the CVM, the chairmen of the veterinary science departments, a small number of key faculty, director of the physical plant, architects, engineers, specialty consultants, and attorneys.

The plan shall involve (a) program decisions; coordination of the input from five participating universities; (b) development of a detailed program of space requirements; (c) preliminary architectural drawings; (d) updated capital cost estimates; (e) preparation of an application for federal grants; and (f) writing of model legislation and a preliminary lease agreement.

The cost of the above planning includes: stipends and fringe benefits; fees; payment to the universities for release time for faculty and other professionals; travel; rentals; equipment; materials, and indirect costs. The estimated costs of the above items totals \$500,000.

*Identical to Table 9.4 in full report.

It is recommended that the cost of regional planning be funded by the OWRC. This recommendation is justified because planning a regional CVM represents one of the most compelling ways for the OWRC to pursue several of its goals such as to:

1. develop natural and human resources and increase skills as part of an effort to expand industrial and business opportunities;
2. strengthen and expand the economic base through programs directed at halting out-migration, raising median family income, and providing additional job opportunities; and
3. enhance the quality of life through improved educational opportunities.

The Northern Plains CVM will be a highly effective force to increase animal production by reducing the losses attributed to livestock diseases. The OWRC, by supporting planning of the regional CVM can make a momentous impact on the economic development of the livestock industry and animal agribusiness in the Region.

Table 8 Timetable for Development of the Northern Plains College of Veterinary Medicine

Date	Decisions or Actions
Feb. 1976	Approval of "Feasibility Study" by the OWRC. Authorization by the OWRC of \$500,000 for planning the Northern Plains CVM. The planning shall include: program decisions, coordination with participating universities, detailed program of space requirements, preliminary architectural drawings, updated capital cost estimates, application for federal grant, lease agreement, and model legislation. Funds for planning shall be released after three of the five universities adopt the "Feasibility Study" in <u>principle</u> .
Apr. 1976	Adoption <u>in principle</u> by the cooperating universities of the proposal to establish a Northern Plains College of Veterinary Medicine; appointment of a dean, consultants, and planning staff.
Jan. 1977	Approval of the program and facility plans by the cooperating universities.

	Approval of the program and facility plans by the OWRC.
	Model legislation available for presentation to the state legislatures.
Feb. 1977	Review of plans with the AVMA Council of Education.
June 1977 to June 1979	Decisions by legislatures to establish a Northern Plains CVM and initial appropriation of operating funds by the cooperating states and capital funds by Nebraska. Apply to AVMA Council on Education for pre- accreditation evaluation of plans for programs and their implementation to achieve status of "reasonable assurance" of accreditation. Begin architectural and engineering work. Apply to Commissioner, U.S. Office of Education, for "Certificate of Reasonable Assurance of Accreditation." Apply to U.S. Dept. HEW for construction grant, if Congress has renewed authorization.
July 1979	Start construction. Continue faculty recruitment, and detailed curriculum planning.
Aug. 1981	Complete construction.
Sept. 1981	Admit first class



